

Allied Signal (Morristown, N.J.) available as the A, B, C, and D series in a variety of average particle sizes ranging from 5 microns to 60 microns. Preferred are the ACumistTM A-25, A-30, and A-45 oxidized polyethylene particles having a means particle size of 25, 30, and 45 microns, respectively. Examples of commercially available polypropylene particles include the Propyltex series available from Micro Powders (Dartek) and ACuscrubTM 51, available from Allied Signal (Morristown, N.J.) having a mean particle size of about 125 microns.

In the Claims:

Please cancel Claims 1-30 without prejudice.

Please add the following new Claims:

- 31. A process for treating a fabric in need of treatment comprising the steps of:
 - a. exposing a fabric to a lipophilic fluid and water;
 - b. recovering said lipophilic fluid and said water in the form of a lipophilic fluid and water emulsion from said fabric;
 - c. exposing said lipophilic fluid and water emulsion to an absorbent matrix comprising an absorbent material comprising a polymer selected from the group consisting of surface cross-linked polyacrylate, surface cross-linked polyacrylamide and mixtures thereof, in order to effect the removal of said water from said lipophilic fluid and water emulsion such that the lipophilic fluid is recovered as collected lipophilic fluid.
- 32. A process according to Claim 31 wherein said absorbent matrix comprises a spacer material in an amount from at least about 1% to at most about 50% by volume of the dry bulk matrix and is selected from the group consisting of sand, silica, aluminosilicates, glass microspheres, clay, layered silicates, wood, natural textile materials, synthetic textile materials, alumina, aluminum oxide, aluminum silicate, zinc oxide, molecular sieves, zeolites, activated carbon, diatomaceous earth, hydrated silica, mica, microcrystalline cellulose, montmorillonite, peach pit powder, pecan shell powder, talc, tin oxide, titanium dioxide, walnut shell powder, particles of different metals or metal alloys and mixtures thereof.





- 33. A process according to Claim 32 wherein said spacer material is selected from the group consisting of particles made from polybutylene, polyethylene, polyisobutylene, polymethylstyrene, polypropylene, polystyrene, polyurethane, nylon, polytetrafluoroethylene and mixtures thereof.
- 34. A process according to Claim 31 wherein said absorbent material comprises a high surface area material in an amount from at least about 1% to at most about 50% by volume of the dry bulk matrix.
- 35. A process according to Claim 31 wherein said absorbent material has a morphology selected from the group consisting of fibrous morphology, particulate morphology and mixtures thereof.
- 36. A process according to Claim 31 wherein said absorbent matrix is in a form selected from the group consisting of a porous woven sheet impregnated with absorbent materials, a film, a membrane and mixtures thereof.
- 37. A process according to Claim 31 further comprising the step of passing said lipophilic fluid and water emulsion through a particulate matter filter such that particles and particle aggregates about 1 micron or larger are removed.
- 38. A process according to Claim 31 further comprising the step of exposing said lipophilic fluid and water emulsion to activated carbon.
- 39. A process according to Claim 31 further comprising the step of triggering said absorbent material to release said removed water by exposing said absorbent material to a trigger mechanism selected from the group consisting of light, pH, temperature, sound, electric field, pressure, ionic strength, vibration and mixtures thereof.
- 40. A process according to Claim 31 wherein the temperature of said lipophilic fluid and water emulsion is at least about 10°C and at most about 50°C prior to exposing said emulsion to said absorbent material.

- 41. A process according to Claim 31 further comprising the step of exposing said collected lipophilic fluid to activated carbon.
- 42. A process according to Claim 31 further comprising the step of exposing said removed water to activated carbon.
- 43. A process according to Claim 31 wherein said lipophilic fluid and water emulsion comprises up to about 10% emulsifier by weight of the emulsion.
- 44. A process according to Claim 31 wherein said lipophilic fluid comprises a linear siloxane and/or a cyclic siloxane.
- 45. A process according to Claim 31 wherein said lipophilic fluid comprises decamethylcyclopentasiloxane.
- 46. A process according to Claim 31 wherein said lipophilic fluid and water emulsion also comprises adjunct ingredients selected from the group consisting of enzymes, bleaches, surfactants, fabric softeners, perfumes, antibacterial agents, antistatic agents, brighteners, dye fixatives, dye abrasion inhibitors, anti-crocking agents, wrinkle reduction agents, wrinkle resistance agents, soil release polymers, sunscreen agents, anti-fade agents, builders, sudsing agents, composition malodor control agents, composition coloring agents, pH buffers, waterproofing agents, soil repellency agents and mixtures thereof.
- 47. A system for removing water from a lipophilic fluid and water emulsion removed from a fabric exposed to a lipophilic fluid and water, said system comprising exposing said emulsion to an absorbent matrix comprising an absorbent material comprising a polymer selected from the group consisting of surface cross-linked polyacrylate, surface cross-linked polyacrylamide and mixtures thereof, in order to effect the removal of said water from said lipophilic fluid and water emulsion such that the lipophilic fluid is recovered as collected lipophilic fluid.